

Name: \_\_\_\_\_

Show all work on the quiz in the space provided. Correct answers without work will not receive credit. There are to be no calculators used for this quiz.

(4 points) 1. Convert the following equations (a) from rectangular to polar and (b) from polar to rectangular.

(a)  $2xy = -1$

(b)  $r = \frac{3}{2 + \sin \theta}$

(a)

(b)

(6 points) 2. Make a table with at least 6 values for  $\theta$  of the equation  $r = 2 - 3 \cos \theta$  and graph this equation, labelling your points. Be sure to show work for any symmetry properties you use!

